



A Temporary Rock Silt Check Type-B (also referred to as a check dam) is a small dam with a distinguishable weir. The primary purpose of this device is to reduce erosion in a drainage ditch by restricting the velocity of flow in the channel. They are generally made of class B stone and typically used in ditches during construction where the grade meets or exceeds 2.5%.

**AREAS OF USE:**

- In channels, roadside ditches, temporary silt ditches, and temporary diversions.
- Temporary channels that are susceptible to erosion but where permanent stabilization is impractical due to their short period of usefulness.
- Eroding channels where construction delays or weather conditions prevent timely installation of non-erosive liners.
- In conjunction with type-B silt basin.

**DESIGN CRITERIA:**

- The drainage shall be limited to ½ acre or less.
- Type-B temporary rock silt check spacing should be  $(2.5 / \% \text{ of ditch grade}) \times 100 \text{ ft.}$

**CONSTRUCTION SPECIFICATIONS:**

- Center of rock silt check shall be at least 1 ft. lower than the outer edges (top of the channel sides).
- Keep the maximum height of 2 feet at the center of the rock check.
- Keep side slopes of the check at 2:1 or flatter.
- Ensure that the maximum spacing between checks places the toe of the upstream check at the top of the downstream check.
- Key the stone into the ditch banks and extend it beyond the abutments a minimum of 18 inches to avoid washouts from overflow around the check.

**MATERIAL SPECIFICATIONS:**

- Structural stone shall be class B stone that meets the requirements of Section 1042 of the Standard Specifications for Stone for Erosion Control, Class B.

**PAYMENT:**

- |                                   |            |
|-----------------------------------|------------|
| • Installation of measure:        |            |
| Stone for Erosion Control Class B | Ton        |
| • Silt cleanout of device:        |            |
| Silt Excavation                   | Cubic Yard |

**MAINTENANCE:**

- Inspect rock check after each significant rainfall.
- Remove silt from device when it accumulates.
- Rebuild and reshape device and weir when damaged or as necessary.
- Cleanout when clogged by straw, limbs or other debris.

**TYPICAL PROBLEMS:**

- Rock silt check is not rebuilt when damaged by storms, equipment, etc.
- Rock sit check and weir section not constructed properly.
- Rock silt checks are not constructed higher than drainage ditch, causing water to flow around the measure allowing erosion of the channel.
- Rock silt checks not built wide enough to intercept ditch slope at top of rock check.
- Maintenance not performed in a timely manner, allowing the build up of silt accumulation and debris that makes the rock silt check ineffective.
- Improper spacing, allowing velocity to build and erode channel.